AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-217

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

********** AMSAT 2007 Space Symposium **********

The Wireless Association of South Hills Amateur Radio Club announces the 2007 AMSAT Space Symposium will be held at the Pittsburgh Airport Marriott Hotel on Friday, October 26 through Sunday, October 28, 2007.

The AMSAT web team has posted informational pages on the AMSAT web site. You can find the announcement with many links at:
http://www.amsat.org/amsat-new/symposium/2007/index.php

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SB SAT @ AMSAT $ANS-217.01
Central States VHF Conference Award

AMSAT News Service Bulletin 217.01
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
BID: $ANS-217.01

The annual Central States VHF Society meeting in San Antonio, Texas included technical presentations, a technical achievement award to Bob, N4HY, and a generous financial contribution to AMSAT.

Among the many AMSAT folks in attendance were W4MO, W7LB, W5IU, W3XO, N4HY, K5SDR, W5SXD, N6TX, KL7UW and K3IO. There were no satellite specific papers presented this year, but the world of DSP and SDR was very much present. K5SDR presented his new SDR5000 radio. KL7UW (with the SDR-IQ) and W5LUA (with the Softrock-40) reported on the use of SDR receivers for various VHF/UHF/Microwave tasks.

AMSAT highlights of the meeting came at Saturday Night's banquet. Tom, K3IO accepted a financial contribution from CSVHFS for AMSAT.

A special moment of the meeting came when Bob McGwier, N4HY, AMSAT BoD member and VP Engineering was presented the 2007 John Chambers

Memorial Award for technical achievement, recognizing his many SDR and AMSAT activities. Bob joins previous AMSAT Chambers Award recipients W0LER, W0PN, W3GEY, N6TX, K2UYH, WB5LUA, WA5VJB & K3IO.

Bob's reaction, "I have had great partners in all of my work. I am grateful for all of the ideas, support, trust, complaints, advice that have flown freely from the SDR, Flex groups, TAPR, ARRL, and of course, AMSAT. The John Chambers award is one I am extremely proud to have as all of my engineering mentors in amateur radio have received it including, but not limited to, Tom and Jan King."

[ANS thanks Tom, K3IO for the above information]

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SB SAT @ AMSAT $ANS-217.02
AMSAT EAGLE Design, Construction, and Testing

AMSAT News Service Bulletin 217.02
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
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Jim Sanford, WB4GCS, AMSAT Eagle's Project Manager recognized significant contributions to the EAGLE satellite design. Jim wrote, "Some of the folks recruited since or around last year's Symposium have done GREAT things for Eagle. I'm referring to Juan Rivera, WA6HTP, and the Project Oscar team tht he assembled. They have purchased materials for, constructed, and are testing the U-band receiver. This process has taught us many thing about our PROCESSES and designs, as well as done great things for the particular project at hand. AND THEY HAVE DOCUMENTED IT WELL!"

Jim continued, "Bill Ress, N6GHZ is another newcomer who has done great things. At a time when EAGLE's Advanced Communication Package is still in the conceptual design stage, Bill took it upon himself to design an S2-band receiver and built it. He did so on his own dime and did it in a way that lends itself to experimentation - modularized construction."

Bob, N4HY, added, "Marc Franco, N2UO and Al Katz, K2UYH have delivered a paper to an international audience on our 145 MHz amplifier design. It is HUGELY efficient. Based on Cree Semiconductor amplifiers, it will be state of the art. We will be able to produce the most efficient and most linear HELAPS we have ever produced based on this work. Marc is the lead on this development and is now designing the modulator and driver stages."

Also Bob, N4HY and Tom, K3IO are working with development tools and new development boards to get the pieces of the SDX designed/simulated to deliver the signals needed for the HELAPS nonlinear channel and the modulator.

Lou McFadin, W5DID and his compatriots have made good progress on critical system elements for the best charge regulation system we have ever flown.

One of the discoveries arising out of testing the UHF receiver design is a recognition that we may need to redesign the switching power supply on the CAN-Do! widgets. So, I'm seeking a switching power supply designer. That individual will be faced with a wide range of load currents (tens of mA to A), very small "real estate" on the board, and demanding EMI requirements. Jim summarized, "Anyone interested in

this exciting project should contact me directly and immediately."
(wb4gcs@amsat.org).

At the AMSAT Symposium in October, papers will be presented on the U Rx,
the S2 Rx, and on the V-band power amp.

[ANS thanks Jim, WB4GCS for the above information]

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SB SAT @ AMSAT $ANS-217.03
AO-51 First L-SSB Up / S-FM Down QSO

AMSAT News Service Bulletin 217.03
>From AMSAT HQ SILVER SPRING, MD.
August 5, 2007
To All RADIO AMATEURS
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During the first week of August, AO-51 was in the L/S mode of operation.
Gould, WA4SXM, AO-51 Command station noted, "Due to a commnd station error
AO-51 first came up in L (USB) uplink / S (FM) downlink mode for a day.
Nevertheless Ib, OZ1MY determined the correct modulation scheme and had
a QSO with Willi, OE6AG this afternoon. Probably a first for this mode."
AO-51 was then put in the FM mode for the uplink on its next pass over a
command station. This demonstrated the versatile configuration of this
satellite's radio equipment.

Drew, KO4MA, AMSAT VP-Operations published the AO-51 operating schedule
for the remainder of August:

August 5 - August 20 FM Repeater, V/U

Uplink: 145.920 Mhz FM, NO PL Tone
Downlink: 435.300 Mhz FM
Downlink: 435.150 Mhz FM, 9k6 Telemetry only

August 20 - August 27 FM Repeater, V/U and FM Repeater, L/U

FM Repeater, V/U
Uplink: 145.920 Mhz FM, NO PL Tone
Downlink: 435.300 Mhz FM

FM Repeater, L/U
Uplink: 1268.700 Mhz FM, NO PL Tone
Downlink: 435.150 Mhz FM

August 27 - August 31 FM Repeater, V/U
Uplink: 145.920 Mhz FM, NO PL Tone
Downlink: 435.300 Mhz FM
Downlink: 435.150 Mhz FM, 9k6 Telemetry only

Please send your requests for September to ao51-modes@amsat.org for
consideration.

[ANS thanks Gould, WA4SXM, and Drew, KO4MA for the above information]

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SB SAT @ AMSAT $ANS-217.04
Satellite Shorts From All Over

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+ Dave, ZL2AMD, has done a major revision of the TS-2000, IC-821, and IC-910 interfaces in Uni_Trac. Release file UP3_115 is available on the www.etelectronics.com website.

+ John, LA2QAA, AO-7 Resource Page Log Administrator noted that as of Monday, July 30 there were several Stateside - Europe contacts. The prefixes included K9, G1, DM, F3, EA, LA, UA0, RA3, GJ, I6, HA, OH.

+ CQ Editor Rich Moseson, W2VU says in preparation of the 50th anniversary of the launch of Sputnik coming up in October, CQ Magazine is planning to collect a representative sampling of radio amateur's first-hand recollections to weave into an article for the October issue. Plus, we'd like to hear if this experience had a significant impact on your choice of careers, etc. - in short, did listening for Sputnik change your life? If so, how? Please respond as soon as possible by e-mail directly to a special mailbox at CQ Magazine: sputnik@cq-amateur-radio.com.

[ANS thanks everyone for the above information]

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SB SAT @ AMSAT $ANS-217.05
AMSAT Area Coordinators Wanted

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>From AMSAT HQ SILVER SPRING, MD.
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If you are an experienced satellite operator and would like to give back to AMSAT, here is a great opportunity for you to do that.

Gould, WA4SXM, Director Field Operations says, "I am looking for AMSAT members that would like to actively represent AMSAT in the field by giving talks to local clubs or schools, satellite demonstrations or host an AMSAT table at local hamfests. We have a number of resources to help you do an AMSAT booth or make a presentation or demonstration. If this sounds interesting, please send me an email and I will send you more information about the requirements and expectations."

Gould adds a final note, "To all current Area Coordinators: I sent out an AC Newsletter Friday Aug 3, if you didn't receive it please go to your FOSS account and update your email information. You can also download the Newsletter there. If you have a problem with your FOSS account, send me an email and we will fix that.

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-217.06
ARISS Status Report for the Week of July 30, 2007

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1. ARISS Contact with Challenger Learning Center

On Wednesday, July 25, children attending the Challenger Learning Center of Lucas County, Ohio experienced an ARISS contact. Astronaut Clay Anderson, KD5PLA, answered 26 questions posed to him by the 16 students as a crowd of approximately 80 gathered to watch.

2. Contact With the 21st World Scout Jamboree

An ARISS contact took place with the 21st World Scout Jamboree in Chelmsford, England on August 4. A Special Event Station, GB100J, will operate at the Jamboree from July 27 to August 8, 2007. Approximately 40,000 scouts from 200 countries are expected to attend this event to celebrate the 100th anniversary of scouting, which originated in England. The audio was broadcast on the Jamboree FM Radio Station and webcast on the radio station's website.

3. Crew Debrief Held

On Tuesday, July 24, an ARISS crew debrief was held with Sunita Williams, KD5PLB. Williams, an ISS crew member during Expeditions 14 and 15, completed 33 ARISS contacts with school children around the world while board the ISS. She provided the ARISS team with positive feedback on her participation in the program.

[ANS thanks Carol, KB3LKI for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM